

Patent Application No. 09/683,281

IN THE CLAIMS:

Please amend claims 1, 2, 5, 7, 10, 12, 13 and 15 as follows:

Claim 1. (currently amended) An input system comprising:

a pen input apparatus including:

a plurality of penpoints, ~~and;~~

a selector for selecting a specific penpoint from said

5 plurality of penpoints;

a ground detector configured to detect when the specific
penpoint is in contact with a writing surface;

a control circuit coupled to the ground detector, the control
circuit configured to distinguish between each of the plurality of
10 penpoints and an input apparatus including a type recognition unit
for recognizing the type of said penpoint selected by said selector;
and

a transmitter for transmitting at least the track of said
specific penpoint as position information ~~and transmitting the
15 information on said type recognized by said recognition unit~~ to a
computer system.

Claim 2. (currently amended)

The input system according to
claim 1,

wherein said pen input ~~system~~ apparatus further comprises a
frequency generator coupled to the control circuit for generating a
5 different frequency for each said penpoint selected by said selector,
and electromagnetic wave outputting unit for outputting an
electromagnetic wave having the frequency generated by said frequency
generator, and

an input apparatus including a type recognition unit for
10 recognizing the type of said penpoint selected by said selector said
type recognition unit recognizes the type of said selected penpoint
based on the frequency of the electromagnetic wave output by said
electromagnetic wave outputting unit.

Claim 3. (currently amended)

The input system according to
claim 2,

wherein said selector includes a penpoint pushing-out mechanism
for pushing out a specific penpoint from the plurality of penpoints

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5 in the direction of the pen tip to select it,
~~said pen input apparatus further has a penpoint ground detector~~
~~for detecting whether or not the penpoint pushed out by said penpoint~~
~~pushing out mechanism has been grounded,~~
and said electromagnetic wave outputting unit outputs an
10 electromagnetic wave of a different frequency for each penpoint
grounded by said penpoint ground detector.

Claim 4. (original) The input system according to claim 1,
further comprising a computer system including an application for
generating image information according to said position information
and the information on said type, and a display screen for displaying
5 said image information.

Claim 5. (currently amended) An electronic input apparatus
for transmitting input information drawn with a pen to a computer
system, comprising:

5 a selector for selecting a specific penpoint from a plurality
of penpoints in the pen;

a ground detector configured to detect when the specific
penpoint is in contact with a writing surface;

a control circuit coupled to the ground detector, the control
circuit configured to distinguish between each of the plurality of
10 penpoints;

a coordinate information recognition unit for recognizing a
track drawn with a pen as coordinate information;

a type recognition unit for recognizing the type of said
penpoint; and

15 a transmitter for transmitting said coordinate information
recognized by said coordinate information recognition unit to said
computer system, and adding the information on said type recognized
by said type recognition unit to said coordinate information and
transmitting them to said computer system.

Claim 6. (previously presented) The electronic input
system according to claim 5, wherein said type recognition unit
recognizes the type of said pen by a frequency of electromagnetic
wave generated from said pen.

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Claim 7. (currently amended) An electronic input apparatus comprising:

a digitizer for grasping a track drawn by a penpoint selected in a writing instrument including a plurality of penpoints and
5 allowing a predetermined penpoint to be selected from said plurality of penpoints, and recognizing the attribute of said penpoint;

a ground detector configured to detect when the selected penpoint is in contact with a writing surface;

10 a control circuit coupled to the ground detector, the control circuit configured to distinguish between each of the plurality of penpoints; and

an interface for outputting the position information obtained from the track of said penpoint grasped by said digitizer, and attribute information on said recognized attribute.

Claim 8. (original) The electronic input apparatus according to claim 7, wherein said digitizer allows a recording medium to be placed thereon, and grasps the track drawn on said recording medium by said penpoint of said writing instrument as electronic
5 information.

Claim 9. (original) The electronic input apparatus according to claim 7, wherein said writing instrument includes an oscillation circuit for generating a predetermined frequency, and a coil for outputting an electromagnetic wave by the output from said
5 oscillation circuit,

said oscillation circuit generating a different frequency for each penpoint selected.

Claim 10. (currently amended) A writing instrument for inputting to a digitizer, comprising:

a plurality of penpoints for drawing images on a recording medium placed on said digitizer;

5 a penpoint selector for selecting a specific penpoint from said plurality of penpoints;

a ground detector configured to detect when the specific penpoint is in contact with a writing surface;

a control circuit coupled to the ground detector, the control

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10 circuit configured to distinguish between each of the plurality of penpoints; and

an electromagnetic wave outputting unit for generating, to said digitizer, an electromagnetic wave of a different frequency for each penpoint selected by said penpoint selector.

Claim 11. (original) The writing instrument for inputting to a digitizer according to claim 10, further comprising a pressure detector for detecting whether or not the penpoint selected by said penpoint selector was pressed against said recording medium,

5 wherein said electromagnetic wave outputting unit generates an electromagnetic wave according to the detection result by said pressure detector.

Claim 12. (currently amended) A digitizer comprising:

a pen including a plurality of penpoints and a control circuit configured to distinguish between each the plurality of penpoints;

5 a track recognition unit for recognizing the track of a pen manipulated by the user, the pen including a plurality of penpoints;

a pen information recognition unit for recognizing the information on the type of said penpoint selected according to the information obtained from said pen; and

10 an output unit for generating position information from the track recognized by said track recognition unit, and adding the information on the type of said penpoint recognized by said pen information recognition unit to the generated position information and outputting them.

Claim 13. (currently amended) A method for inputting coordinates comprising the steps of:

5 changing, at a pen, an output frequency of a frequency generator based on a selected penpoint from a plurality of penpoints contained within a the pen;

receiving position information of the pen based on the track drawn by the user on recording medium placed on a coordinate input apparatus, and receiving attribute information on the type of a line used for the track drawn from the coordinate input apparatus; and

10 reflecting said received attribute information on said received

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position information to electronically record image information corresponding to the track drawn by the user on said recording medium.

Claim 14. (original) The method for inputting coordinates according to claim 13, further comprising the steps of:

receiving attribute information on at least either one of the color and thickness of the line, and

5 displaying said electronically recorded image information on a display unit by using a line having a display color corresponding to the color of the line drawn on said recording medium or a thickness corresponding to the thickness of the line drawn.

Claim 15. (currently amended) A method for transmitting coordinate information from a coordinate input apparatus to a computer system, comprising the steps of:

changing, at a pen, an output frequency of a frequency
5 generator based on a selected penpoint from a plurality of penpoints contained within a the pen;

expressing the position information, based on a track drawn by the user with said coordinate input apparatus, in X- and Y-coordinates;

10 adding attribute information on the type of the line giving said track to said position information expressed by said X- and Y-coordinates, thereby to form a block; and

transmitting the formed block in a predetermined unit.

Claim 16. (canceled)

Claim 17. (previously presented) The input system of claim 1, further comprising a frequency generator configured to change an output frequency according to the specific penpoint selected.

Claim 18. (previously presented) The electronic input apparatus of claim 5, further comprising a frequency generator configured to change an output frequency according to the specific penpoint selected.

Claim 19. (previously presented) The electronic input apparatus of claim 7, wherein the writing instrument further includes a

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frequency generator configured to change an output frequency according to the specific penpoint selected.